Census to the world: Show me the Data!

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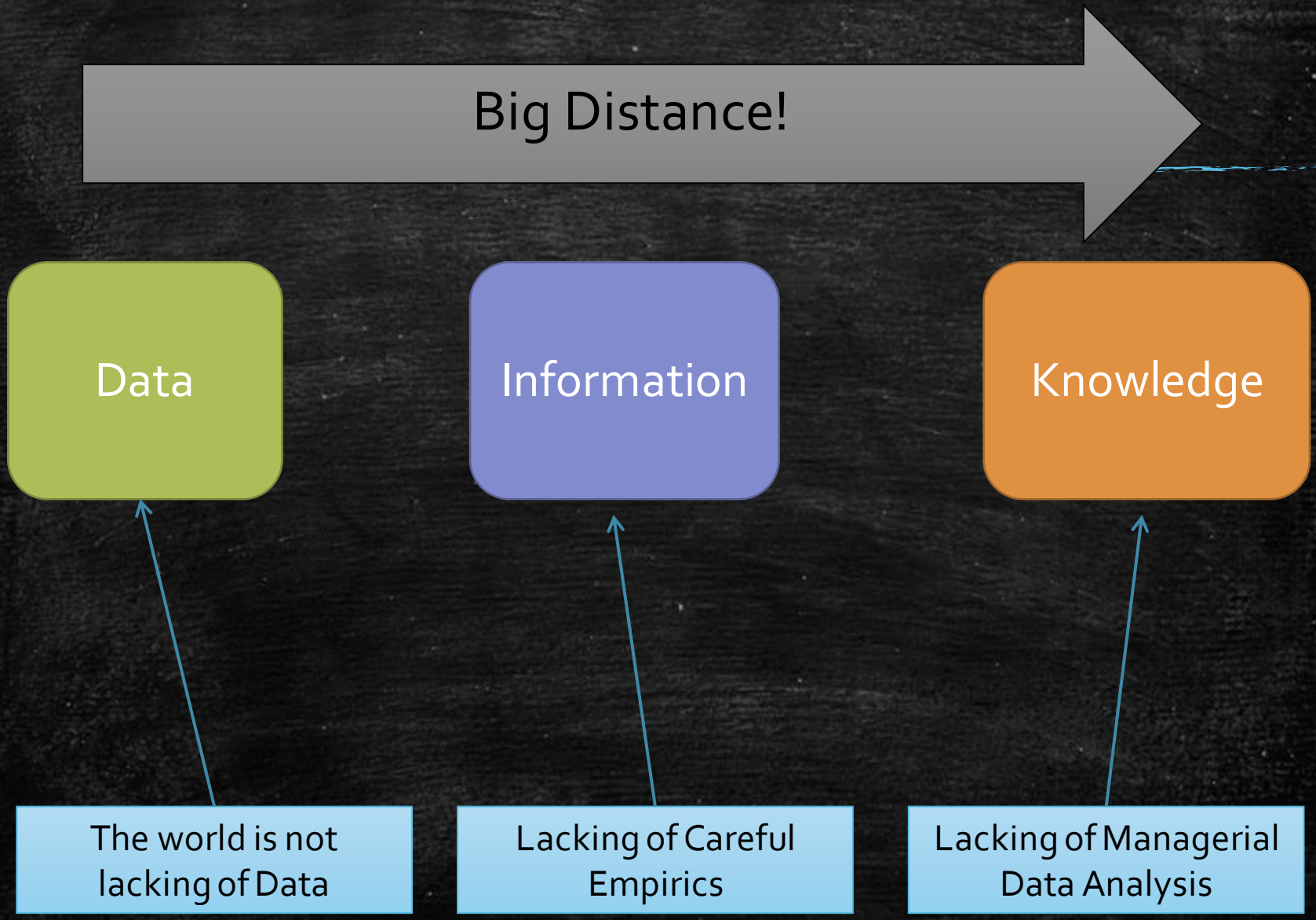
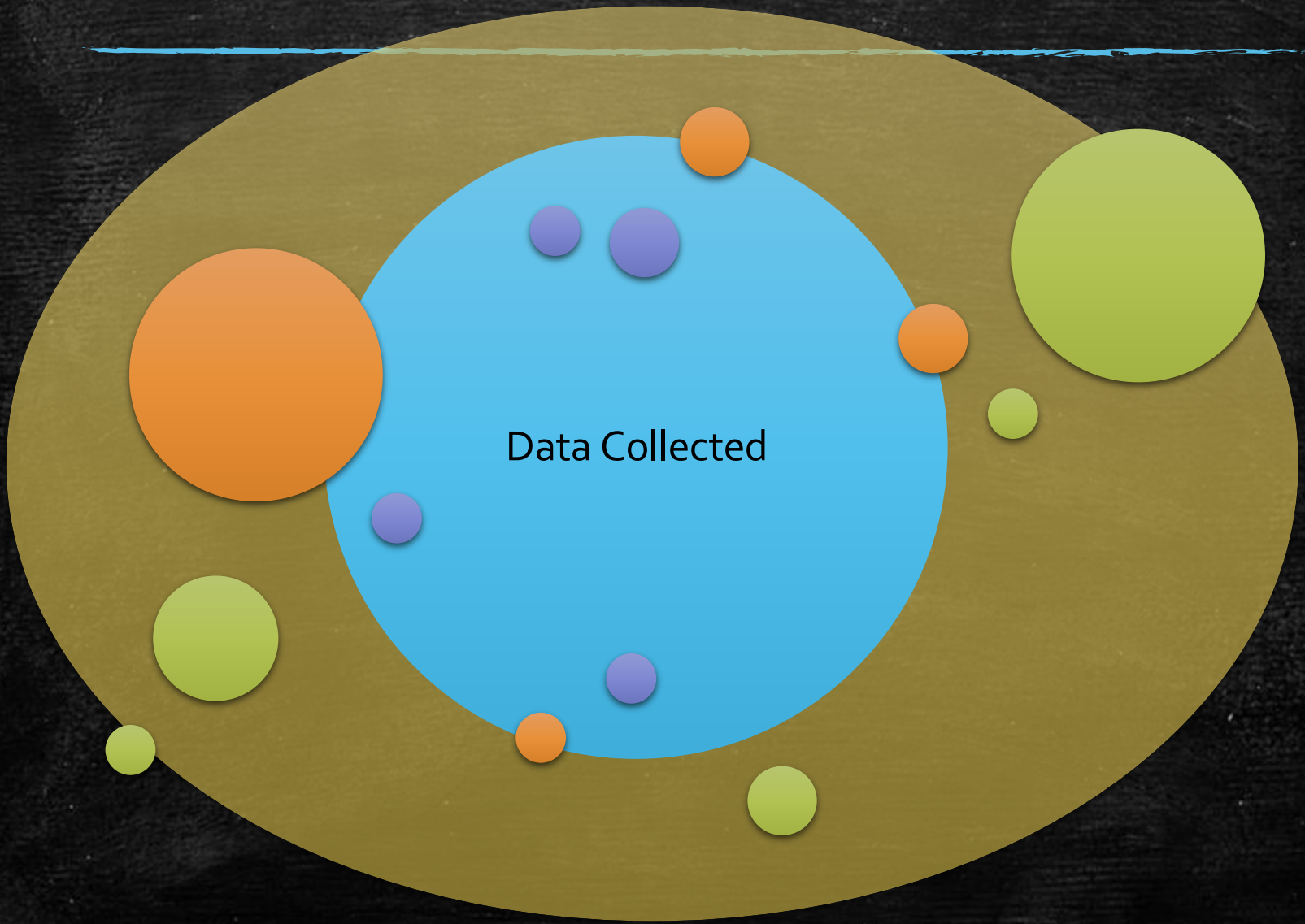

Big Distance!
Data
Information
Knowledge
The world is not lacking of Data
Lacking of Careful Empirics
Lacking of Managerial Data Analysis

Official Data Sources

New Technologies



Word of Caution

- Understand the Data Limitations
  - Identification
    - We need a Question
    - We need to understand the Process
  - Representativeness
    - We need to be cautious with our statements
- Different Data Sources
- Engagement and Research

Identification

- Who is more likely to drown while swimming in the ocean?
  - Actually, great swimmers!

- "Big Data" Approach:
  - Assume we collect every meet
    - Time, Style, Competitors, Place
    - Great measures of ability
  - Also assume we collect all the conditions in which the person drown

- What this data is missing is a measurement of the willingness of the individual to put itself at risk, given its ability

Identification

- The problem of identification cannot be solved by collecting more data, needs to
  - Collect the correct data
  - Design the test/survey properly - which requires understanding the process properly

- In many circumstances this cannot be solved with the data we observe.

Representativeness

- Social networks
  - Who has Facebook Accounts?
  - Who changes its status everyday?
  - Great data source with millions of observations from the same 200 teenagers.

- Reviews have the two problems
  - Decision to review is endogenous
  - Participation is non-representative

Data sources

- Not all data points have the same property
- Prices
  - Apple price of iPhone 6 on the web
  - Price of hotel in Hotel.com
  - Price of air ticket in Kayak.com
  - Prices on liquidation from a supermarket

Data Sources: Quality Ladder

- Utilities and Commercial activity
- Tracking (cellphones, cars, clicks)
- Web-scraping and Scanner from firm
- Measurement devices
- Emails and texts
- Reviews
- Social Networks

Engagement and Research

- Start with small pilots
  - Areas you already measure
  - Try to determine the improvement using alternative procedures to collect
    - Evaluate congruence
    - Evaluate timeliness
- Start with data sets that have the highest quality
- Need to change form of engagement
  - Openness and transparency to researchers
  - Data with a purpose:
    - Understand process
    - Understand weaknesses
    - Understand objective